Accessing Federal Data Bases for Contaminated Site Clean-Up Technologies

Third Edition

Federal Remediation Technologies Roundtable

Prepared by the

Member Agencies of the Federal Remediation Technologies Roundtable

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Federal Remediation Technologies Roundtable:

U.S. Environmental Protection Agency
Department of Defense
 U.S. Air Force
 U.S. Army
 U.S. Navy
Department of Energy
Department of Interior

1993

NOTICE

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NOTE: Data bases marked with an asterisk (*) are appearing for the first time in this edition.

PREFACE

The Federal Remediation Technologies Roundtable developed this publication to provide information on accessing Federal data bases that contain data on innovative remediation technologies. This document updates and expands information presented in the second edition published in 1992. Data bases appearing for the first time in this edition are denoted in the Table of Contents by an asterisk.

The profiles contained in this edition were identified through a review of reports, articles, and publications by Roundtable member-agencies and telephone interviews with data base experts. Roundtable members include the U.S. Environmental Protection Agency (EPA), U.S. Department of Defense (DOD), U.S. Department of Energy (DOE), and U.S. Department of the Interior (DOI). In addition, the National Aeronautics and Space Administration (NASA) participates in Roundtable meetings.

This document is a reference tool that provides information on those systems maintaining data on remedial technologies. It may be used by project managers as a pointer to repositories of technical information, or as a source of contacts that may be useful to future system design. Each data base profile contains information on data elements, system uses, hardware and software requirements, and access. The profiles also contain contacts for each system. A matrix showing system characteristics of the data bases included in this document is provided on page v. The table beginning on page vii summarizes the information contained in the data base profiles.

This publication will be updated periodically. If you have any suggestions or if you would like to offer additional data bases for inclusion in future revisions, please complete the form at the end of this document and return it to the Technology Innovation Office:

> Daniel Powell
> Technology Innovation Office
> U.S. Environmental Protection Agency
> 401 M St., SW, 5102W
> Washington, DC 20460

System Characteristics of Federal Data Bases

System Name	Technology Description	Performance Data	Cost Data	Case Studies	Updated Periodically	User Fee	Public Access	System Operator	Online Capability	Page Number
Alternative Treatment Technology Information Center (ATTIC)	x	x	x	x	x		x	x	x	1
Case Study Data System	x	x		x			x			2
CLU-IN Bulletin Board System (BBS)	x			x	x		x	x	x	3
Cost of Remedial Action Model (CORA)	x	x	x			x	x			5
Defense Environmental Electronic Bulletin Board System (DEEBS)	x				x		x		x	7
Defense RDT&E Online System (DROLS)	x				x	x	x	x	x	8
Energy Science and Technology Data Base	x	x	x		x	x	x		x	9
Environmental Technical Information System (ETIS)	x				x	x	x		x	10
Environmental Technologies Remedial Actions Data Exchange (EnviroTRADE)	x	x		x	x		x	x	x	12
Environmental Technology Information System (TIS)	x	x	x		x				x	13
Hazardous Waste Superfund Data Collection	x	x	x	x	x		x		x	15
Installation Restoration Data Management Information System (IRDMIS)					x					17
National Technical Information Service Bibliographic Data Base	x	x	x	x	x	x	x		x	19
New Technology from DOE (NTD)	x			x	x				x	21

Summary Table of Federal Data Bases

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Alternative Treatment Technology Information Center (ATTIC)	ATTIC is an information retrieval network that provides site remediation managers with technical information on alternative treatment methods for remediating hazardous waste.	The data base contains abstracts from more than 2,000 technical references, including books, EPA publications, journal articles, and treatability studies.	A computer, modem, and communications software are required to access the system.	Online Data: 301-670-3808 (1200 or 2400 baud) or 301-670-3813 (9600 baud) Joyce Perdek U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory 908-321-4380
Case Study Data System	This data system stores and retrieves case-specific information to support rule and guidance development activities affecting facility siting, corrective action, and closure.	The data system contains more than 200 case studies that address topics such as floodplains, disposal technology, treatment, and environmental effects.	The data base system is written in dBase III and formatted for an IBM PC.	Andy O'Palko U.S. Environmental Protection Agency Office of Solid Waste 703-308-8646
CLU-IN Bulletin Board System (BBS)	The system serves as a communications mechanism to assist hazardous waste cleanup professionals obtain current information about innovative cleanup technologies.	The system offers messages, bulletins, computer files, and data bases.	A computer, modem, and communications software are required to access the system.	Online System: 301-589-8366 HelpLine: 301-589-8368
Cost of Remedial Action Model (CORA)	This computerized expert model is designed to recommend remedial actions for Superfund hazardous waste sites and estimate the cost of these actions.	The model is comprised of two independent subsystems: an expert system that uses site information to recommend a range of remedial response actions, and a cost system that develops cost estimates for the technologies selected.	CORA is a stand-alone system requiring an IBM or compatible PC, MS-DOS environment, 640K RAM, and 5MB of hard disk space.	Jaya Zyman CORA Hotline CH2M Hill 703-478-3566

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Defense Environmental Electronic Bulletin Board System (DEEBS)	This system serves as a centralized communications platform for disseminating DERP information pertaining to DOD's scheduled meetings, training, clean-up sites, and technologies.	The system provides user mail service, multi-user access, and upload/download features. It permits access to 800 number dial in and to other environmental data networks.	The system can be accessed with a dumb terminal or a PC with a modem and communications software.	Patricia Jensen Office of the Deputy Assistant Secretary of Defense (Environment) 703-695-7820
Defense RDT & E Online System (DROLS)	This bibliographic data base provides information on DOD's ongoing research and technology efforts.	The system provides access to three separate data bases: Research Work Unit Information System, Technical Report Data Base, and Independent Research and Development Data Base.	The system is available via dial-up to the Defense Technical Information Center's central computer system.	Defense Technical Information Center 703-274-6871
Energy Science and Technology Data Base	This multi-disciplinary bibliographic file contains worldwide references to basic and applied scientific and technical research literature.	The system includes references to journal literature, conferences, patents, book, monographs, theses, and engineering and software materials.	The system is available via dial-up through DOE's Integrated Technical Information System (ITIS) and to the public through DIALOG Information Services.	ITIS DOE Office of Science and Technical Information 615-576-1222 DIALOG Information Services 800-334-2564
Environmental Technical Information System (ETIS)	This system is designed to help DOD conduct analyses to document environmental consequences of its activities.	ETIS's subsystems include data and information exchange on chemicals, regulations, hazardous materials, and hazardous wastes.	The system is available via dial-up with a computer, modem, and communications software capable of VT-100 emulation.	Kim Grein CERL 800-USA-CERL x 652 ETIS Support 217-333-1369
Environmental Technologies Remedial Actions Data Exchange (EnviroTRADE)	This system is being designed to help facilitate the exchange of environmental restoration and waste management technologies.	The system will contain information on international environmental restoration and waste management technologies, organizations, sites, activities, funding, and contacts.	The system will be available to DOE users in 1993 and other users at a later date. Hardware and software requirements have not been finalized.	International Technology Exchange Program U.S. Dept. of Energy 301-903-7930

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Environmental Technology Information System (TIS)	This system provides technical experts with information about potential waste clean-up technologies.	The system offers advice on screening remedial options based on site-specific input information.	The system can be accessed via dial-up using a PC, minicomputer, or mainframe. Special software is required.	Claire Ross Idaho National Engineering Laboratory 208-526-0614
Hazardous Waste Superfund Collection Data Base	This online bibliographic data base corresponds to a special collection of hazardous waste documents located throughout the EPA library network.	The system includes bibliographic references and abstracts on EPA reports, OSWER policy and guidance directives, legislation, regulations, and non-government books.	The system is available online through the EPA Online Library System or it can be downloaded from CLU-IN. Both methods of access require a PC, modem, and communications software.	Felice Sacks EPA Headquarters Library 202-260-3021
Installation Restoration Data Management Information System (IRDMIS)	This data base supports technical and managerial requirements of the Army's Installation Restoration Program and other environmental efforts.	The data base contains analytical results from chemical, geotechnical, and radiological sampling.	The system requires software provided by U.S. Army Environmental Center (USAEC).	Jim Wood USAEC 410-671-1655
National Technical Information Service (NTIS) Bibliographic Data Base	This is a bibliographic retrieval system that references the reports of major federal agencies.	The system consists of unclassified government-sponsored research, development, and engineering reports, as well as other analyses prepared by government agencies and their contractors.	The data base is available through a number of commercial data base vendors, such as DIALOG, BRS, STN, Orbit, and CISTI.	National Technical Information Service U.S. Dept. of Commerce 703-487-4650
New Technology from DOE (NTD)	This system is designed to disseminate information about DOE research results that have potential for commercialization.	The system includes technology descriptions, patent status, secondary applications, literature citations, and DOE information.	The data base is available to DOE users with a computer, modem, and communications software capable of VT-100 emulation.	Integrated Technical Information System 615-576-1222

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Protech & the Technology Catalogue	1. Minimize the time & effort that field personnel spend providing information on their technologies. 2. Provide more detailed technical cost performance data on deployable technologies advanced by DOE's Office of Technology Development (EM-50) to its customers, DOE's Offices of Waste Management (EM-30) and Environmental Restoration (EM-40) and their contractors.	Description of technologies supported under Integrated Demonstrations (IDs).	Macintosh Computer Platform.	ProTech Contact: David Biancosino (DOE-HQ) 301-903-7961 Technology Catalogue Contact: Joe Paladino (DOE-HQ) 301-903-7449
Records of Decision System (RODS)	This system provides comprehensive information on Superfund Records of Decision for hazardous Waste clean-up sites nationwide.	The data base contains the full text of all signed Records of Decision.	A personal computer, modem and communications software are required to access the system.	Jalania Ellis U.S. EPA/OERR 703-603-8889
ReOpt: Electronic Encyclopedia of Remedial Action Options	The system provides information collected from EPA, DOE, and other sources about remedial action technologies.	The system contains diagrams, descriptions, engineering or design parameters, contaminants treated, technical and regulatory constraints, and other information for about 90 technologies.	The system runs on IBM-PC and compatibles in a WINDOWS™ environment and Macintosh II (or greater). It requires at least 5 megabytes of RAM and 12 megabytes of hard disk space. OMNIS SEVEN™ software is embedded in the system, and a fee is required for a license and installation materials.	Janet Bryant Battelle Pacific Northwest Labs 509-375-3765

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Research in Progress Data Base	This data base bridges the information gap that occurs between initiation and completion of a research project by providing information about ongoing research projects.	The data base contains administrative and technical information about all unclassified current and recently completed research projects performed or funded by DOE.	A computer, modem, and communications software capable of VT-100 emulation are required to access the system.	Kelly J. Dwyer U.S. Department of Energy 615-576-9374 DIALOG Information Services 800-334-2564
RREL Treatability Data Base	The data base provides treatability data for the removal/destruction of organic and inorganic chemicals in aqueous and solid media.	The system contains 1,207 compounds with 13,500 data sets.	The data base is menu-driven and can be loaded on an IBM or compatible PC with DOS Version 2.0 to 6.0, 640K RAM, and 7MB of hard disk storage. It is also available for downloading through CLU-IN.	Glenn M. Shaul U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory 513-569-7408
Soil Transport and Fate Data Base and Model Management System	The data base provides information on chemical properties, toxicity, transformation, and bioaccumulation for hundreds of chemical compounds.	The data base includes information on approximately 400 chemicals as well as models for predicting the fate and transport of hazardous organic constituents in the vadose zone.	The data base will run on any IBM-compatible computer with 640K RAM, 12.5 MB of hard disk storage, and a math coprocessor.	David S. Burden R.S. Kerr Environmental Research Laboratory U.S. Environmental Protection Agency 405-332-8800
Technology Integration System Support (TISS)	This system supports DOE in the development of new environmental technologies by providing a central focus for information exchange between DOE and industry, other federal agencies (OFAs), and universities.	Includes DOE environmental technologies, points of contact, DOE documents, vendor information, DOE procurement activities, and requestor data bases.	NextStep system which runs object-oriented Knowledge Base on 486 platform.	Richard Machanoff, Project Manager, HAZWRAP, Martin Marietta Energy Systems, Inc. 615-435-3173 DOE Environmental Technology Information Service 800-845-2096
Vendor Information System for Innovative Treatment Technologies (VISITT)	This system serves as a communications tool for technology vendors and government and private clean-up personnel.	The data base includes a variety of information ranging from summary performance data to waste limitations.	VISITT requires an IBM-compatible PC with 640K of RAM and 4 MB of hard disk space and DOS 3.3 or higher.	VISITT Hotline 800-245-4505 or 703-883-8448

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Waste Management Information System (WMIS)	The system provides an accurate and complete resource for the explanation and selection of appropriate technologies for handling hazardous, mixed, radioactive, or remedial action waste.	The system includes waste generation/process data, information on T/S/D capabilities, and waste profiles.	WMIS resides on a Novel local area network at DOE.	Lise Wachter HAZWRAP 615-435-3281

Alternative Treatment Technology Information Center (ATTIC)
U.S. Environmental Protection Agency
Risk Reduction Engineering Laboratory
Edison, New Jersey

System Description and Use

The Alternative Treatment Technology Information Center (ATTIC) is a collection of hazardous waste treatment data bases that are accessed through an electronic bulletin board. In addition to the data bases, the bulletin board features news items, bulletins, computer files, and a messaging system that enables users to communicate and request advice from one another and to seek help from the system operator. The ATTIC system is continually being improved and updated.

Data

ATTIC users can access four data bases directly through the BBS:

- ATTIC Data base (contains over 2000 records on alternative treatment technologies for remediating hazardous waste)

- RREL Treatability Data base (provides data on the treatability of contaminated water and soil—see p. 28)

- Technical Assistance Directory (identifies experts on a given technology or contaminant)

- Calendar of Events (lists upcoming conferences and events)

Access

Users can dial directly into the ATTIC system through their own computer by dialing 301-670-3808. Users without access to a computer or those with questions about the system can contact the system operator for assistance.

Hardware/Software

ATTIC is accessible by any PC or terminal equipped with communications software and a modem.

Contact

Joyce Perdek
U.S. EPA/Risk Reduction Engineering Laboratory (RREL)
2890 Woodbridge Ave. (MS-106)
Edison, NJ 08837
908-321-4380
908-906-6990

U.S. Environmental Protection Agency
Office of Solid Waste
Washington, DC

System Description and Use

The Case Study Data System (CSDS) is an inventory of over 220 case studies that were developed to support RCRA rule and guidance development activities affecting facility location, RCRA Corrective Action, and closure. The system was completed in April 1990. The system can be used to identify case studies that contain information on treatment technologies used at various specific hazardous waste sites.

Data

The case studies are organized by number in a library at EPA. The CSDS is the indexing system for this library that identifies appropriate case studies by using data fields and keywords. The case studies contain formatted information about the geology, general problems, processes associated with waste handling, and treatment technologies (including innovative, standard, and regular procedures) for specific sites. The case studies address a variety of topics such as floodplains, disposal technology, treatment, and environmental effects.

Access

The data base is available for downloading from the Cleanup Information (CLU-IN) Bulletin Board (see p. 10). The manual is available to those who fill out an online script questionnaire on CLU-IN requesting a copy.

Hardware/Software

The Case Study Data System is written in dBASE III and is formatted for use on an IBM PC or compatible computer.

Contact

Andy O'Palko
U.S. EPA/Office of Solid Waste
Mail Code 5303W
401 M St., SW
Washington, DC 20460
703-308-8646
703-308-8617 (fax)

Cleanup Information Bulletin Board System (CLU-IN)
U.S. Environmental Protection Agency
Technology Innovation Office
Washington, DC

System Description and Use

The Cleanup Information Bulletin Board System (CLU-IN) is designed for hazardous waste cleanup professionals to use in finding current events information about innovative technologies, consulting with one another online, and accessing data bases. CLU-IN is used by those involved in the cleanup of Superfund, Resource Conservation and Recovery Act corrective action, and underground storage tank sites, including EPA staff, other Federal and State personnel, consulting engineers, technology vendors, remediation contractors, researchers, community groups, and the public.

Data

CLU-IN has the following features:

- **Electronic messages** allowing users to leave messages for individual users or to a large audience of users

- **Bulletins** that can be read online such as summaries of *Federal Register* and *Commerce Business Daily* notices on hazardous waste, descriptions and listings of EPA documents, a calendar of EPA training courses, notices of upcoming meetings and SITE Program demonstrations, and the text of EPA newsletters

- **Files** that can be downloaded for use on the user's computer—such as directories, data bases, models, and EPA documents

- **Online Data Bases** that can be searched on CLU-IN

In addition, CLU-IN has special interest group areas (SIGs) with all of the functions of the Main Board, but limited to a particular group or subject area. Examples of SIGs include, Treatability Study Investigation, OSC/Removal, and Groundwater Technologies.

Access

Users can dial directly into CLU-IN at 301-589-8366. Communications settings are:

8 data bits
1 stop bit
No parity
1200-9600 baud
VT-100 terminal emulation

Hardware/Software

To access CLU-IN, you will need a computer, modem, telephone line, and communications software.

Contact

CLU-IN System Operator
301-589-8368
301-589-8487 (fax)

Cost of Remedial Action (CORA) Model
U.S. Environmental Protection Agency
Office of Emergency and Remedial Response
Washington, DC

System Description and Use

The Cost of Remedial Action (CORA) Model is a computerized expert advisor used to recommend remedial actions for Superfund hazardous waste sites and estimate their costs. The stand-alone PC-based system may also be used for RCRA corrective action sites. The model is designed for both current site-specific estimates and for program budgeting and planning. The system provides recommendations for remedial action technologies on a site-specific basis, and provides a method to estimate remedial action costs in the pre-feasibility stage of analysis.

Data

The CORA Model is comprised of two independent subsystems:

- Expert System—allows a user to enter site information generally accessible at the remedial investigation stage and recommends a range of remedial response actions from among 44 technology descriptions contained in the system. It includes descriptions of innovative treatment technologies:

Soil vapor extraction	Soil flushing
Solidification	*In situ* biodegradation
Soil slurry bioreactor	*In situ* stabilization
Pressure filtration	

- Cost System—develops order of magnitude (+50/-30%) cost estimates for the technologies selected and may be used to independently assess remedy recommendations from other sources.

Access

The model is available from the contact below for a cost of $280 which includes a run-time version of the system and one hour of technical assistance.

Hardware/Software

The CORA Model is a stand-alone application, not designed for LAN use. The following are the hardware specifications:

- IBM-compatible PC
- MS-DOS environment
- 640 kilobytes of RAM
- 5 megabytes of hard disk space

Contact

CORA Hotline:
Jaya Zyman
CH2M Hill
625 Herndon Parkway
Herndon, VA 22070
703-478-3566
703-481-0980 (fax)

Defense Environmental Electronic Bulletin Board System (DEEBBS)
U.S. Department of Defense
Washington, DC

System Description and Use

The Defense Environmental Electronic Bulletin Board System (DEEBBS) serves as a centralized communication platform for disseminating Defense Environmental Restoration Program (DERP) information pertaining to DOD's clean-up sites, technologies, program policy and guidance, scheduled meetings, and training. It fosters online communications and technology transfer among DOD components.

Data

DEEBBS contains a messaging component as well as the capability for file transfers. DEEBBS includes information on cleanup technologies, policies, and regulatory information.

Access

DEEBBS is an online system available only to DOD personnel.

Hardware/Software

The system can be accessed with a dumb terminal or a computer, modem, and communications software.

Contact

For online access:
Kim Grein
CERL/Army Corps of Engineers
P.O. Box 9005
Champaign, IL 61826-9005
800-USA-CERL, ext. 652
217-373-7222 (fax)

Patricia Jensen
Office of the Deputy Assistant Secretary of Defense (Environment)
Pentagon, Room 3D833
Washington, DC 20301-8000
703-695-7820
703-697-7548 (fax)

Defense RDT&E Online System (DROLS)
U.S. Department of Defense
Defense Technical Information Center
Alexandria, Virginia

System Description and Use

The Defense RDT&E Online System (DROLS) was developed by the Defense Technical Information Center (DTIC) to provide online access to its data collection of ongoing Department of Defense (DOD) research and technology efforts. The system includes citations to reports distributed by DOD. DROLS is used to identify, input, and order-documents. The system can be searched by author, source, date, title, subject, project, contract, report numbers, and funding sources.

Data

DROLS provides access to three separate data bases:

- Research and Technology Work Unit Information System (WUIS) Data Base (containing ongoing DOD research and technology efforts at the work unit level)

- Technical Report Data Base (consisting of bibliographic records of technical reports submitted to DTIC)

- Independent Research and Development (IR&D) Data Base (containing contractors' independent research and development efforts shared with DOD). This data base is proprietary and accessible only to classified DOD terminals

Access

DROLS is an online system that can be accessed through the DTIC central computer system. To subscribe to the online system, contact DTIC at the number below.

Hardware/Software

Classified users are required to use dedicated phone lines requiring special encryption equipment or STU-III installation. Dial-up or dedicated access to DROLS is available for unclassified users.

Contact

Defense Technical Information Center
Attn: Registration and Services Branch (DTIC-BCS)
Building 5, Cameron Station
Alexandria, VA 22304
703-274-6871

Energy Science and Technology Data Base
U.S. Department of Energy
Office of Science and Technical Information
Oak Ridge, Tennessee

System Description and Use

The Energy Science and Technology Data Base is a multi-disciplinary bibliographic data base containing references to basic and applied scientific and technical energy- and nuclear-science related research literature worldwide. The information is collected for use by government managers and researchers at the DOE National Laboratories, other DOE researchers, and the public. Abstracts are included for most records. Items date from 1976 to the present, with older literature included in some subject areas.

Data

The Energy Science and Technology Data Base includes references to journal literature, conferences, patents, books, monographs, theses, and engineering and software materials. Approximately 50 percent of the references are from foreign sources. Coverage includes the following areas of energy-related research:

- Engineering
- Environmental sciences
- Geosciences
- Hazardous waste management
- Materials handling

The data base is continually updated by about 180,000 records per year. The system can be searched by author, title, subject, and research organization.

Access

The Energy Science and Technology Data Base is available to the public through DIALOG Information Services (a commercial system) for a fee. A limited version of the system is also available to DOE employees, DOE contractors, and other government agencies through DOE's Integrated Technical Information System (ITIS). In addition, DIALOG has a companion file called Nuclear Science Abstracts, covering the period from 1947 to mid-1976, that is not available through ITIS.

Hardware/Software

Users can dial into the system through DIALOG with a computer, modem, and communications software. DOE users should contact ITIS for access.

Contact

Integrated Technical Information System (ITIS)
U.S. DOE/OSTI
P.O. Box 62
Oak Ridge, TN 37831
615-576-1222

DIALOG Information Services
800-334-2564

Environmental Technical Information System (ETIS)
U.S. Army Corps of Engineers
Construction Engineering Research Laboratory
Champaign, Illinois

System Description and Use

The Environmental Technical Information System (ETIS) is a minicomputer-based system designed to help Department of Defense personnel conduct environmental analyses to document environmental consequences of its activities. The system is now used by other Federal agencies as well as the general public.

Data

The ETIS system contains a number of subsystems including:

- Environmental Impact Computer System (to identify potential environmental impacts of programs or activities)

- Computer-Aided Environmental Legislative Data System (CELDS) (to allow users to search Federal and State environmental regulations by keywords)

- Hazardous Materials Management System (contains data on hazardous chemicals including physical and chemical properties, guidance for handling, storage, and transportation)

- Soils Information Retrieval System (provides information on soils anywhere in the United States)

- Hazardous Waste Management Information System (assists in record-keeping for and management of hazardous waste at military bases)

- Electronic bulletin boards (for networking with others involved in site cleanup). Electronic bulletin boards on ETIS include:

- Discuss with Experts Environmental Problems (DEEP)—used primarily by installation environmental officers. Covers air quality, asbestos, wildlife conservation, cultural resources, compliance, environmental management, noise conflict, resource conservation and recovery, solid waste, and water quality. Lists environmental experts at each Army and Air Force base as well as training courses and job listings.

- Hazardous Expertise (HAZE)—for users involved in hazardous materials handling and disposal. Covers disposal methods, labeling, good management practices, hazardous waste minimization, testing and dispensing, spill control, hazardous materials storage, and hazardous waste treatment.

Access

Users can dial into ETIS once they have set up an account. To obtain an account, military, DOE, and EPA users should contact the CERL contact below. Private sector and other users should contact the ETIS Support Center. There is a connect hour fee for non-military and non-EPA users.

Hardware/Software

ETIS is accessible by a computer or terminal equipped with communications software and a modem. VT-100 emulation is recommended.

Contact

ETIS Support Center
Elizabeth Dennison
1003 West Nevada St.
Urbana, IL 61801
217-333-1369

Kim Grein
CERL/Army Corps of Engineers
PO Box 9005
Champaign, IL 61826-9005
800-USA-CERL, ext. 652
217-373-7222 (fax)

Environmental Technologies Remedial Actions Data Exchange (EnviroTRADE)
U.S. Department of Energy
Office of Environmental Restoration and Waste Management
Washington, DC

System Description and Use

The Environmental Technologies Remedial Actions Data Exchange (EnviroTRADE) is an international information system that will facilitate the exchange of environmental restoration and waste management technologies.

Data

EnviroTRADE contains both foreign and domestic technologies and needs profiles. Users can identify possible matches between worldwide environmental restoration and waste management needs and technologies. EnviroTRADE will also provide general information on international environmental restoration and waste management organizations, sites, activities, funding, and contracts. The system is user friendly, providing visually oriented information such as photographs, graphics, maps, and diagrams of technologies and sites. The system has expanded into a fully functionally Geographical Information System (GIS).

Hardware/Software

EnviroTRADE is in the final stages of development. DOE plans to make it available to DOE users in 1993 with domestic and international networking to follow. Informix/Online is the Relational Data Base Management System and the Graphical user Interface is DevGuide. EnviroTRADE is presently being developed on a SUN workstation and will migrated to the PC and Macintosh in FY93.

Access

Network access as planned will be online through Internet.

Contact

Susan Johnson
International Technology Exchange Program
U.S. Dept. of Energy
Trevion II, EM-523
Washington, DC 20585-0002
301-903-7930

Environmental Technology Information System (TIS)
Department of Energy
Idaho National Engineering Laboratory
Idaho Falls, Idaho

System Description and Use

The Environmental Technology Information System (TIS) contains technology information relative to innovative and available technologies to support environmental management. Cost, vendor information, previous uses (if any), and measures of effectiveness are included when those data are available in the literature.

Uses of the TIS include:

- Online access to information regarding technologies for environmental management processes

- Aid in identification of currently listed technologies

- Aid in access of other computerized information (through "launch" of other computer programs)

- Documentation of technology choices

- Linkage of information from one document to another

- Data collection and storage

- Full-text retrieval of technology information

Data

The TIS provides descriptive information gathered from journals and other references, conference proceedings, and expert experience. Retrieval of information is by any word found within the TIS. Expert knowledge is built into the TIS by use of logic trees to aid the uninitiated user. Current users continue to add information to the TIS.

Access

While the TIS development project is not currently funded, access of the present system is available to the Department of Energy and its contractors upon request. It is possible that the TIS will be "privatized."

Hardware/Software

TIS resides on a VAX/DEC 5800 ethernet server which is accessible by IBM-compatible or Macintosh PC, minicomputer, or mainframe. A "client piece" of the "Topic" software is required.

Contact

Claire Ross
U.S. DOE/Idaho National Engineering Laboratory
P.O. Box 1625-3970
Idaho Falls, ID 83415
208-526-0614
208-526-6802 (fax)

System Description and Use

The Hazardous Waste Superfund Collection is a special collection within the EPA Headquarters Library on the subject of hazardous waste. The Hazardous Waste Superfund Collection Data Base (HWSFD) is a data base containing bibliographic references and abstracts for the documents in the collection. The data base is designed to better meet the information needs of EPA staff by making key documents and services more readily available through the EPA Library Network. The system provides:

- a unified resource of major hazardous waste reports, books and journals available through the EPA Library Network.

- current information to assist EPA staff in making timely and effective policy and regulatory decisions.

- assistance in the transfer of hazardous waste information from the EPA to the states as part of the Agency's technology transfer effort.

Data

Continually growing, the HWSFD contains abstracts of books, legislation, regulations, reports from Federal agencies, EPA Office of Solid Waste and Emergency Response (OSWER) policy and guidance directives, and EPA reports from selected program offices.

Entries can be searched by the following categories:

- Keywords (from a thesaurus)
- Title
- EPA program office
- Date
- Author
- Abstract

The HWSFD is updated quarterly. Selected documents from the Collection are distributed to the 10 EPA Regional libraries as well as to EPA laboratory libraries in Ada, Oklahoma; Cincinnati, Ohio; Edison, New Jersey; Las Vegas, Nevada; Research Triangle Park, North Carolina; and the National Enforcement Investigations Center in Denver, Colorado.

Access

The Data Base is available to the public through two sources: 1) the EPA Online Library System (OLS) which resides on the EPA mainframe (online version), and 2) files that can be downloaded from EPA's CLU-IN Bulletin Board (PC version). To access either version, a user will need a computer, modem, and communications software.

The number to dial into the online version is 919-549-0720. The communications parameters are as follows:

300-9600 baud
7 data bits
1 stop bit
Even parity

At the first prompt, type **IBMPSI**.
At the second prompt, choose the option for **OLS**.
To log off, type **QUIT** and follow the prompts.

For user support, call 800-334-2405. For an OLS user manual, call 919-541-2777.

Files to assemble the PC version can be downloaded from the CLU-IN Bulletin Board by dialing 301-589-8366. Parameters are:

8 data bits
1 stop bit
No parity
1200-9600 Baud

Hardware/Software

Both versions can be accessed with a PC, modem, and communications software.

Contact

Felice Sacks
Hazardous Waste Superfund Collection
EPA Headquarters Library
Mail Code: PM-211A
401 M St., SW
Washington, DC 20460
202-260-3021

CLU-IN Help Line
301-589-8368

Installation Restoration Data Management Information System
U.S. Army Environmental Center (USAEC)
Aberdeen Proving Ground, Maryland

System Description and Use

The Installation Restoration Data Management Information System (IRDMIS) exists to support the technical and managerial requirements of the Army's Installation Restoration Program (IRP) and other environmental efforts of the U.S. Army Environmental Center (formerly U.S. Toxic and Hazardous Materials Agency). Since 1975, over five million technical data records have been collected and stored in the IRDMIS. These records represent information collected from over one-hundred Army installations.

Data

The records contain information on:

- Geodetic map coordinates of all sampling efforts
- Digitized map information pertaining to installation boundaries and other key features
- geodetic elevations
- field drilling procedures and sampling
- Water table measurements
- Chemical sampling and analytical results
- Radiological sampling and results
- Meteorological information
- Standards for specific analytes
- Method descriptions of chemical, geotechnical, and radiological sampling and analysis procedures

Data consist primarily of analytical results from chemical, geotechnical, and radiological sampling coupled with sampling location information. A printed Data Dictionary specifying data base filed definitions, acceptable entries, and file formats is available upon request.

The IRDMIS data is stored in a relational data base with menus for accessing data and producing reports. Graphical display capabilities are provided so that users can interactively view and manipulate data in two and three dimensions.

Access

The system is available to USAEC project managers and contractors actively submitting data into IRDMIS. Contractors are restricted to data concerning their respective activities only. Access by other Federal and State agencies are handled on a case by case basis.

Hardware/Software

Users are provided with DOS-based software to access the data base.

Contact

Jim Wood
USAEC
Attn: CETHA-Room I
Building E, 4462T
Aberdeen Proving Ground, MD 21010-5401
410-671-1655

National Technical Information Service (NTIS) Bibliographic Data Base
U.S. Department of Commerce
Springfield, Virginia

System Description and Use

The National Technical Information Service (NTIS) Bibliographic Data Base is a self-supporting agency of the U.S. Department of Commerce and is the largest single source for public access to Federally produced information. NTIS is the Federal agency charged with collecting and distributing Federal scientific, technical, and engineering information. The NTIS collection covers current technologies, business and management studies, foreign and domestic trade, environment and energy, health, social sciences, general statistics, and hundreds of other areas. When government agencies and their contractors forward reports and other items to NTIS, these items are entered into the NTIS computerized bibliographic data base and become part of the NTIS archive.

Data

The NTIS bibliographic data base contains data about Federally-generated machine-readable data files and software, U.S. government inventions available for licensing, reports on new technologies developed by Federal agencies, Federally generated translations, and reports prepared by non-U.S. government agencies. An increasing proportion of the data base consists of unpublished material originating outside the U.S. Most NTIS records include an abstract.

Access

The NTIS data base is available to the public through a number of commercial vendors including:

- BRS (800-345-4277)
- CISTI (613-993-1210/in Canada)
- DIALOG (800-334-2564)
- ORBIT (800-456-7248, 703-442-0900/in Virginia)
- STN International (800-848-6533)

Some of these systems also allow ordering printed copies of documents from the NTIS collection. NTIS also allows ordering of documents from the sales desk (703-487-4650).

The data base is also available on CD-ROMs from a number of vendors.

Hardware/Software

The hardware and software required to access NTIS online depend upon the individual system used, but generally include a computer, modem, and communications software for dial-in access and a computer and CD-ROM drive for a CD-ROM version.

Contact

National Technical Information Service
U.S. Department of Commerce
Springfield, VA 22161
703-487-4650
703-321-8547 (fax)

System Description and Use

New Technology from DOE (NTD) contains brief descriptions of Department of Energy (DOE) research results that have potential for commercialization by United States industries. This data base is the centralized source of online information on DOE technical innovations and advancements.

Data

Each NTD record includes a technology description, patent status, secondary or spinoff applications, literature citations, DOE laboratory and sponsoring information, subject descriptors, and a contact for further information. The NTD currently contains 1200 records from 1986 to the present. It is anticipated that older records dating from 1983 will be added to the data base.

Access

The data base is available to DOE and its contractors through the Integrated Technical Information System (ITIS). Public access is provided through the National Technical Information Service's Technology Transfer Program.

Hardware/Software

DOE and its contractors can access the ITIS using a computer, modem, and communications software capable of VT-100 emulation.

Contact

Integrated Technical Information System
U.S. DOE/Office of Science and Technical
Information
P.O. Box 62
Oak Ridge, TN 37831
615-576-1222

Technology Transfer Program
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
703-487-4738

Prospective Technology (ProTech) and the Technology Catalogue
U.S. Department of Energy
Office of Environmental Restoration and Waste Management
Washington, DC

System Description and Use

Computer-based communication tool to describe innovative environmental cleanup technologies. ProTech can provide management support to IDCs and DOE Office of Technology Development personnel as well as minimize the time & effort that field personnel spend providing information on their technologies. It will provide more detailed technical cost performance data on deployable technologies advanced by the Office of Technology Development to its customers, DOE's Offices of Waste Management (EM-30) and Environmental Restoration (EM-40) and their contractors. The Technology Catalogue will take and use the data produced by Protech and be distributed to personnel throughout DOE and its laboratory system.

Data

ProTech is a prototype system that has been approved to become a national system to describe innovative environmental cleanup technologies. The user is presented with a schematic that divides all technologies into five categories: drilling, characterization and monitoring, extraction, above-ground treatment, and in-ground destruction and/or immobilization of contaminants. Each of these categories are divided into "ID technologies" and "baseline technologies." The user can click on any technology and pull up a fact sheet describing the need and objective of the technology and a graphic describing the components of the technology.

Hardware/Software
Macintosh computer platform.

Access

Still in prototype. System is expected to be ready late May or June of 1993.

Contact

ProTech:

Nancy Prindle (Sandia National Labs)
505-844-7227

David Biancosino
301-903-7961
U.S. Department of Energy

Gretchen McCabe
206-528-3338
(Battelle Seattle Research Center)

Technology Catalogue:

Joe Paladino (DOE-HQ)
301-903-7449

Records of Decision System (RODS)
U.S. Environmental Protection Agency
Office of Solid Waste and Emergency Response
Washington, DC

System Description and Use

The Records of Decision System (RODS) is an online data base containing the full-text of the Superfund Records of Decision for National Priorities List sites nationwide. The Record of Decision contains information about the remediation technology to be used for a site, including the justification for why the technology was chosen. The RODS system can be used to:

- Search for a Record of Decision for a particular Superfund site

- Search for Records of Decision for sites with similar conditions, wastes, or media

- Search for Records of Decision for sites that use a particular technology

Data

Each record in the RODS system contains the text of a single Record of Decision (ROD). A Record of Decision describes EPA's selection of the cleanup method to be used at a site. The ROD usually includes a history of the site, description of alternatives for cleaning up the site, rationale for the chosen cleanup method, cost estimates, and a responsiveness summary of the public comments received. The system can be searched by Region, State, site name, ROD date, ROD ID number, media, contaminant, selected keywords, remedy, abstract, and full text.

Access

Direct access to RODS is available only to EPA staff members and firms that have relevant EPA contracts. Contact the RODS Help Line for an account. For those who are not eligible for direct access, searches will be done by an information specialist at the RODS Help Line.

Hardware/Software

RODS is located on EPA's mainframe computer in Research Triangle Park, North Carolina, and is accessible through a computer, modem, and communications software. EPA employees may have direct access to the RODS system through their LANs or through access to the EPA data switch.

Contact

Jalania Ellis
U.S. EPA/OERR
401 M Street, SW
  Mail Code 5201G
Washington, DC 20460
703-603-8889

ReOpt: Electronic Encyclopedia of Remedial Action Options
(Formerly Remedial Action Assessment System [RAAS] Technology Information System)
Battelle Pacific Northwest Laboratories
Richland, Washington

System Description and Use

ReOpt is a user-friendly personal computer program that provides information about remedial action technologies. The information contained in ReOpt is derived from a number of sources, including Department of Energy (DOE), Environmental Protection Agency (EPA), and industry sources. ReOpt provides descriptions of approximately 90 technologies, breaking the information into useable categories of information, including application and regulatory information for nearly 850 contaminants. ReOpt was developed for DOE as part of the remedial Action assessment System (RAAS) project.

Data

For each technology, ReOpt contains information for the following categories:

- Flow diagram
- Description
- Engineering or Design Parameters
- Contaminant Applicability
- Data Requirements
- Associated Technologies
- Technical Constraints for site, medium, and contaminant
- Regulatory Constraints for site, medium, and contaminant
- References
- Previous Applications

ReOpt allows users to search by media, contaminant, and the way the functional manner in which the user wants to restore the site (such as, *in situ* treatment) to focus the analysis of those technologies potentially applicable to the scenario.

Access

The system is available on diskette for Federal government users and their contractors under a Limited Government License from the Energy Science and Technology Software Center (ESTSC). ReOpt is available for purchase for non-Federal and commercial use through Sierra Geophysics (Halliburton Industries) located in Kirkland, Washington, (1-800-826-7644, ext. 120).

Hardware/Software

ReOpt is available to run on IBM-PC and compatibles in a WINDOWS™ environment and Macintosh II (or greater) computer systems. The system requires a high-resolution color monitor (supporting 640 x 480 pixels); a mouse; a 3.5" high density disk drive; at least 5MB of RAM; and approximately 12MB hard disk storage space. The system contains an embedded data base software product, OMBIS SEVEN™ by Blyth Corporation and requires that a licensing fee be paid to obtain this license and the installation materials.

Contact:

Energy Science and Technology Software Center
615-576-2606

Janet Bryant
Battelle - Pacific Northwest Laboratory
P.O. Box 999, MSIN: K7-94
Richland, WA 99352

RAAS/ReOpt FAX Hotline: 509-375-6417

Research in Progress (RIP) Data Base
U.S. Department of Energy
Office of Scientific and Technical Information
Oak Ridge, Tennessee

System Description and Use

The Research in Progress (RIP) Data Base contains administrative and technical information about all unclassified current and recently completed research projects performed funded by the Department of Energy (DOE). This file bridges the information gap that occurs between initiation and completion of a research project. It serves as a technology transfer medium, a management information system for use in program planning and implementation, a system for current awareness and networking for the scientific community, and a resource base for publishing summaries of research in specific programmatic areas.

Data

RIP contains information on approximately 23,000 DOE research efforts. Records are maintained for five years after project completion. All information on file is updated annually or when significant changes occur. With each annual data base update, researchers may change the information to reflect current work.

Access

RIP is available to DOE and its contractors through the DOE Integrated Technical Information System. It is available to the public as part of the Federal Research in Progress (FEDRIP) data base on the DIALOG information system (a commercial system) for a fee. Some records and data elements appropriate only for DOE use are omitted from the FEDRIP version.

Hardware/Software

RIP is accessible by any IBM or compatible personal computer or Macintosh equipped with a modem and communications software capable of VT-100 emulation. FEDRIP is available via dial-up to the DIALOG system with a computer, modem, and communications software.

Contact

Kelly J. Dwyer
U.S. DOE/Office of Scientific and Technical
Information
P.O. Box 62
Oak Ridge, TN 37831
615-576-9374

DIALOG Information Services
800-334-2564

RREL Treatability Data Base
U.S. Environmental Protection Agency
Risk Reduction Engineering Laboratory
Cincinnati, Ohio

System Description and Use

The RREL Treatability Data Base provides a thorough review of the effectiveness of proven treatment technologies in the removal or destruction of chemicals from media such as municipal and industrial wastewater, drinking water, groundwater, soil, debris, sludge, and sediment. The data base includes only those technologies that are commercially available. The data base is distributed to Federal, State, and local governments; foreign governments; academia; industry; and many other groups.

Data

Version 5.0 of the data base was released in May 1993 and contains 1207 compounds and 13,500 treatability data sets. The data base is organized by chemical. For each compound, the data base includes:

- Physical/Chemical Properties
- Freundlich Isotherm Data
- Aqueous and Solid Treatability Data
- Scale (Bench, Pilot, or Field)
- Average Concentration of Contaminants in Influent and Effluent
- Average Percentage of Removal
- Reference Citations with a Reference Abstract

Access

The data base is available for free upon request. To obtain a diskette copy of the system, send a written request or fax to the contact listed below. Please indicate the disk size (5 1/4 HD or 3 1/2 HD) you prefer. The system is also searchable online through ATTIC (see page 1) and is downloadable from CLU-IN (see page 3).

Hardware/Software

The Data Base is a stand-alone menu driven system that runs on an IBM PC or compatible using DOS 2.0 to 6.0. The system requires 7 megabytes of hard disk space and 640 kilobytes or RAM.

Contact

Glenn M. Shaul
U.S. EPA/RREL
26 West Martin Luther King Dr.
Cincinnati, OH 45268
513-569-7408
513-569-7787 (fax)

Soil Transport and Fate Data Base and Model Management System
Center for Subsurface Modeling Support
U.S. Environmental Protection Agency
Robert S. Kerr Environmental Research Laboratory
Ada, Oklahoma

System Description and Use

The Soil Transport and Fate (STF) Data Base Version 2.0 presents quantitative and qualitative information concerning the behavior of organic and inorganic chemicals in soil. The STF Data Base provides users with recent information on chemical properties, toxicity, transformation, and bioaccumulation for hundreds of chemical compounds. It can be used by environmental managers, scientists, and regulators working on problems related to vadose zone contamination and remediation.

Data

The software consists of three major components: the STF Data Base; the Vadose Zone Interactive Processes (VIP) Model and Regulatory and Investigative Treatment Zone (RITZ) Model; and the VIP and RITZ model editors. The data base includes approximately 400 chemicals identified by chemical name (as referenced in 40CFR Part 261), the Chemical Abstract Service (CAS) number, and the common chemical name. The VIP and RITZ models are one-dimensional models that are used in predicting the fate and transport of hazardous organic constituents in the vadose zone. The VIP and RITZ model editors aid in the creation of input files for the respective models and are designed to interface with the STF Data Base.

Access

Users can obtain a copy of the system and user manual by sending six pre-formatted diskettes (360K minimum) to the address listed below.

Hardware/Software

The hardware/software requirements for the STF Data Base and Model Management System are:

- IBM-compatible computer
- 640K RAM
- Math coprocessor (for VIP and RITZ models only)
- 12.5 megabytes of hard disk space

Contact

David S. Burden
Center for Subsurface Modeling Support
U.S. EPA/Robert S. Kerr
 Environmental Research Laboratory
P.O. Box 1198
Ada, OK 74820
405-332-8800

Technology Integration System Support (TISS)
U.S. Department of Energy
Office of Environmental Restoration and Waste Management
Washington, DC

System Description and Use

This system supports DOE in the development of new environmental technologies by providing a central focus for information exchange between DOE and industry, other federal agencies (OFAs), and universities.

Data

Includes DOE Environmental Technologies, DOE Technology Needs, DOE Documents, DOE Procurement Activities, Vendor Information, Requestor Data Base, and DOE Points of Contact.

Hardware/Software

NextStep system using object oriented, multi-tasking Knowledge Base on a 486 platform.

Access

Call DOE-HQ central point of contact at Environmental Technology Information Service to provide information or request information. DOE transmits the request to Oak Ridge Information Center which provides the requested information. An information packet is prepared and mailed in response to the request.

Contact

Richard Machanoff
Project Manager, HAZWRAP
Martin Marietta Energy Systems, Inc.
615-435-3173

DOE Environmental Technology Information Service
1-800-845-2096

Vendor Information System for Innovative Treatment Technologies (VISITT)
U.S. Environmental Protection Agency
Technology Innovation Office
Washington, DC

System Description and Use

The Vendor Information System for Innovative Treatment Technologies (VISITT) contains technology information submitted by developers, manufacturers, and suppliers of innovative treatment technology equipment and services. The system can be used by hazardous waste cleanup professionals to learn about the application and performance of these new technologies. VISITT version 2.0 became available in June 1993.

Data

VISITT contains data on vendors of innovative remediation technologies to treat ground water *in situ*, soils, sludges, and sediments. Examples of technologies included are soil washing, thermal desorption, bioremediation, solvent extraction, and *in situ* vitrification. The data base does not include more established technologies—incineration, solidification/stabilization, and *ex situ* groundwater treatment. Technologies may be at the bench-, pilot-, or full-scale.

Each vendor profile in VISITT includes company information, technology description, technology advantages and limitations, and applicable media, wastes, and contaminants. The vendor may provide additional information on technologies at the pilot or full scale, including performance data, waste limitations, unit costs, available hardware and capacity, project names and contacts, permits obtained, treatability study capabilities, and references.

VISITT version 2.0 contains information on about 230 technologies offered by about 140 developers and vendors. Based on the information provided by vendors, nearly 65% of the innovative technologies in VISITT are commercially available at full scale. Almost 70% of vendors provide performance data.

Access

VISITT is available on diskette free of charge from EPA's National Center for Environmental Publications and Information (NCEPI). EPA is evaluating the feasibility of offering VISITT online through an existing bulletin board system such as ATTIC (see page 1) or CLU-IN (see page 3).

Hardware/Software

VISITT requires an IBM-compatible PC with at least 640 kilobytes of memory, 4 megabytes of hard disk space, and MS-DOS 3.3 or higher. It is available on either 3 1/2 or 5 1/4 diskettes.

Contact

VISITT Hotline
PRC Environmental Management, Inc.
1505 Planning Research Drive
McLean, VA 22102
800-245-4505 or 703-883-8448
703-556-2852 (fax)

To Order

Send name, organization, address, phone number and diskette size (3 1/2" or 5 1/4") to:

U.S. EPA/NCEPI
P.O. Box 42419
Cincinnati, OH 45242-2419
(513) 891-6685

System Description and Use

The Waste Management Information System (WMIS) is a dynamic system currently being developed as a management and planning tool. The system provides an accurate and complete resource for information pertaining to waste streams and treatment, storage, and disposal facilities throughout the Department of Energy (DOE) complex. WMIS in its present form is populated with mixed, hazardous, and radioactive waste data from the various DOE sites. As DOE's primary waste management information system, WMIS supports a variety of DOE programs as well as customizing reports to meet the needs of specific projects. During FY 1993, WMIS was migrated from a VAX 8700 mainframe to a microcomputer-based environment.

Data

The data exists in two major areas:

- Treatment, Storage, and Disposal (T/S/D) Capabilities—a compilation of DOE facilities, both existing and planned, for the treatment, storage, and disposal of waste. Storage capabilities, capacities, and information on types of acceptable feedstocks are included. Treatment and disposal methodologies are presented with operating parameters and restrictions.

- Waste Profiles—data on the various waste streams that have been identified for waste management activities. Data includes generation rates, quantities, characterization, point of contact information, and applicable waste management options.

The data in the two areas presented above are being merged through an artificial link that enables the user to determine which waste profiles or waste streams are managed at the facilities listed in the T/S/D Capabilities.

Access

Direct access to the system is available at DOE Headquarters.

Hardware/Software

The database resides on a Novel local area network and applications are written in FoxPro.

Contact

Lise Wachter, HAZWRAP
Martin Marietta Energy Systems, Inc.
P.O. Box 2003, MS-7606
Oak Ridge, TN 37831-7606
615-435-3281

Suggestions

If you know of additional sources of information or specific data bases that should be included in this publication, or if you are often in need of this type of information and don't know how to find it, please make a note on this page. This is a self-addressed mailer — just add postage, and drop it in the mail.